

# Hepatitis B Virus

**Administering Department:** Virology

**Test Contact:** Kari Getz 334-2235 ext 229

**Purpose of Test:** To detect the presence of infection or immunity to the Hepatitis B Virus.

**Method:**

Enzyme-linked Immunoassays for Hepatitis B Surface Antigen (HBsAg), Hepatitis B Core Total Antibody (anti-HBc), and Hepatitis B Surface Antibody (anti-HBs).

**Sample and Submission Guidelines:**

1-2 ml serum or plasma; remove specimen from clot as soon as possible to avoid hemolysis

Properly labeled specimens must be accompanied by STD or Virus Misc. & Serological Test form complete with date of collection and submitter address.

**Possible Results and Meaning:**

Tests	Results	Interpretation
HBsAg anti-HBc anti-HBs	negative negative negative	susceptible
HBsAg anti-HBc anti-HBs	negative positive positive	immune due to natural infection
HBsAg anti-HBc anti-HBs	negative negative positive	immune due to hepatitis B vaccination
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive positive negative	Acutely infected
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive negative negative	Chronically infected
HBsAg anti-HBc anti-HBs	negative positive negative	Four interpretations possible  1. May be recovering from acute HBV infection. 2. May be distantly immune and test not sensitive enough to detect very low level of anti-HBs in serum. 3. May be susceptible with a false positive anti-HBc. 4. May be undetectable level of HBsAg present in the serum and the person is actually a carrier

The Idaho State Lab does not perform Hepatitis B IgM Core Antibody testing. Specimens can be referred to private laboratory if it is determined that testing will be helpful.

### Turn-Around-Time:

Testing performed once per week. All positive Hepatitis B Surface Antigen tests are confirmed by a Neutralization Test

### Hepatitis B Diagnostic Profiles

